

## AMENDMENTS TO THE CLAIMS

A complete list of all the presently or formerly pending claims in the application is provided below, with suitable headings to show the status of each claim and, where appropriate, its current text.

1. (Previously Presented) A process for preparing roughened copper surfaces suitable for subsequent multilayer lamination, said process comprising the steps of: (a) applying a highly built alkaline cleaning solution to a copper surface to provide a substantially clean copper surface; and (b) dipping the clean copper surface into an adhesion promoting composition to provide a uniform roughened copper surface suitable for subsequent multilayer lamination, said adhesion promoting composition consisting essentially of an oxidizer, a pH adjuster, a topography modifier, and a coating promoter.
2. (Previously Presented) The process according to claim 1, said adhesion promoting composition further consisting essentially of a uniformity enhancer.
3. (Previously Presented) A process for increasing the adhesion of a dielectric material to a metal surface, wherein the metal surface comprises copper or copper alloys, said process comprising:
  - (a) contacting the metal surface with an adhesion promoting composition comprising an adhesion-promoting effective amount of:
    - (1) an oxidizer;
    - (2) an acid;

- (3) a topography modifier; and
- (4) a coating promoter;

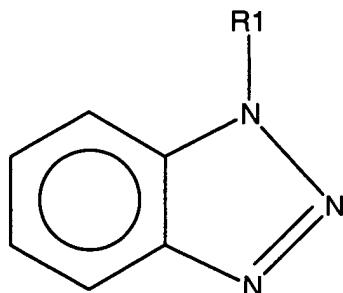
(b) bonding the dielectric material to the metal surface which has been contacted with said adhesion promoting composition.

4. (Original) A process according to claim 3 wherein the adhesion promoting composition further comprises a uniformity enhancer.

5. (Original) A process according to claim 3 wherein the topography modifier is a 5-membered aromatic fused N heterocyclic compound, wherein the N heterocyclic ring has a nitrogen atom at position 1 bonded to a hydrogen atom.

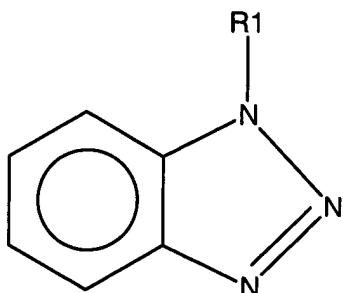
6. (Original) A process according to claim 3 wherein the coating promoter is a 5-membered aromatic fused N-heterocyclic compound with 1 to 3 nitrogen atoms in the fused ring, wherein none of said nitrogen atoms are bonded to a hydrogen atom.

7. (Original) A process according to claim 3 wherein the coating promoter has the following structure:



wherein R1 is selected from the group consisting of hydroxyl groups, amino groups, alkyl groups, hydroxyalkyl groups, aminoalkyl groups, nitroalkyl groups, mercaptoalkyl groups, and alkoxy groups.

8. (Original) A process according to claim 3 wherein the coating promoter is 1-hydroxybeznotriazole.
9. (New) A method of preparing a printed circuit board for subsequent multilayer lamination, comprising the steps of:
  - (a) providing a printed circuit board, said printed circuit board comprising an imaged layer of copper bonded to a dielectric substrate; and
  - (b) contacting said imaged layer of copper with a surface roughening composition comprising:
    - (1) an oxidizer;
    - (2) an acid;
    - (3) a topography modifier, wherein said topography modifier is a 5-membered aromatic fused N-heterocyclic ring compound, wherein the N-heterocyclic ring has a nitrogen atom at position 1 bonded to a hydrogen atom; and
    - (4) a coating promoter having the following structure:



wherein R1 is selected from the group consisting of hydroxyl groups, amino groups, alkyl groups, hydroxyalkyl groups, aminoalkyl groups, nitroalkyl groups, mercaptoalkyl groups, and alkoxy groups;

wherein the surface of said imaged layer of copper is roughened by said contacting step.

10. (New) The method of claim 9, wherein said surface roughening composition further comprises a copper salt.
11. (New) The method of claim 9, wherein said contacting step takes place in a tank having stainless steel surfaces.
12. (New) The method of claim 11, wherein said surface roughening composition further comprises a copper salt, wherein said copper salt protects said stainless steel surfaces from chemical attack.